

TITLE OF ABSTRACT: THE ROLE OF SERUM C REACTIVE PROTEIN IN
EARLY DETECTION OF COLORECTAL
ANASTOMOTIC LEAKGE – A PROSPECTIVE
OBSERVATIONAL STUDY

DEPARTMENT:	GENERAL SURGERY
NAME OF CANDIDATE:	DR EMMANUEL L
DEGREE AND SUBJECT	M.S. GENERAL SURGERY
NAME OF GUIDE:	DR MARK RANJAN JESUDASON

OBJECTIVES: To establish clinically useful post-operative CRP values to facilitate safe discharge after elective colorectal surgery and assess the effect of laparoscopic approach on post-operative CRP values

METHODS: Serum CRP levels in patients undergoing elective abdominal surgery with a primary anastomosis was measured preoperatively and on post-operative day 4 for a total of 113 patients. All patients were followed up for 15 days for development of an anastomotic leak. The CRP values obtained were analyzed by receiver operator curve analysis to assess the diagnostic accuracy of a day 4 CRP value as an early detector of anastomotic leak.

RESULTS: Day 4 CRP cutoff value with highest area under the curve in the receiver operator curve analysis was calculated and was 166mg/L for both open and laparoscopic procedures. The value for open procedures alone was also 166mg/L. Laparoscopic cut off

value was 203mg/L but limited by the lesser leaks in the laparoscopic group. (4 out of 33 laparoscopic surgeries. An elevated CRP on day 4 above 166mg/L is a sensitive and specific marker for early detection of a colorectal anastomotic leak.

.